CLAIMS

I CLAIM:

- A data center comprising:
- a building,
- an explosion protection system surrounding the building,
- a primary roof of the building,
- a secondary roof inside the building forming a mezzanine deck, said mezzanine deck being located below said primary roof and spanning an interior of the building,
- an air handling unit located below said mezzanine deck and above a floor of the building, and
- a distribution system for water and communication lines being located below the floor of the building.
- 2. The data center as claimed in claim 1, wherein the building includes a plurality of rooms interconnected by a corridor.
- 3. The data center as claimed in claim 2, wherein the distribution system is located below the corridor.
- 4. The data center as claimed in claim 3, wherein a ceiling of the corridor defines a space located below the mezzanine deck, the air handling unit is located in the space.

- 5. The data center as claimed in claim 2, wherein a plurality of air handling units are connected to each of the rooms to provide at least two times of air cooling capacity to each of the rooms in the event of failure of one of the air handling units.
- 6. The data center as claimed in claim 1, wherein the explosion protection system includes a plurality of bollards surrounding the building.
- 7. The data center as claimed in claim 1, wherein condensate from the air handling unit is communicated to the distribution system.
- 8. The data center as claimed in claim 1, wherein the distribution system further includes a five suppression system.
- 9. The data center as claimed in claim 1, wherein the distribution system further includes a chilled water supply line and a chilled water return line.
- 10. The data center as claimed in claim 9, wherein the chilled water supply line and the chilled water return line are connected by valves to a bypass water line for use in the event of maintenance or failure of one of the chilled water supply line and the chilled water return line.